

(19)



JAPANESE PATENT OFFICE

## PATENT ABSTRACTS OF JAPAN

(11) Publication number: **08280688 A**

(43) Date of publication of application: **29.10.1996**

(51) Int. Cl. **A61B 8/00**  
G01B 17/00, G01N 29/06

(21) Application number: **08079243**  
(22) Date of filing: **01.04.1996**  
(30) Priority: **31.03.1995 US 95 414978**

(71) Applicant: **SIEMENS MEDICAL SYST INC**  
(72) Inventor: **WENG LEE**  
**TIRUMALAI ARUN P**

### (54) METHOD AND APPARATUS FOR GENERATING LARGE COMPOUND ULTRASOUND IMAGE

#### (57) Abstract:

**PROBLEM TO BE SOLVED:** To generate a large compound ultrasound image by presuming and estimating a total image motion based on a local motion vector in each sub-image region between consecutive image frames and indicating a compound XFOV image based on the image motion.

**SOLUTION:** Two consecutive image frames 31, 32 are respectively as a frame n-1 (a previous frame) and a frame n (a present frame), and the previous image frame n-1 is used as a standard image. The present image frame n obtained by transferring a transducer along a surface of the skin is compared to the previous

image frame n-1 to presume and estimate a transducer motion. To presume and estimate the image motion from the frame n-1 to the frame n, the frame n is divided into several sub-frame regions 34, and each local motion in the sub-frame regions is presumed and estimated.

COPYRIGHT: (C)1996,JPO

